Family Firm Succession:
The Roles of Specialized Assets and Transfer Costs[1]

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Abstract

This paper reports an average negative 56 percent buy-and-hold market-adjusted stock return of emerging market entrepreneurial/family firms during a 5-year period in which their controlling owners pass on ownership and control to their successors. The value destruction is importantly attributable to the difficulties in partitioning and transferring specialized assets across individuals and/or firm boundaries, including intangible assets such as relationships with employees and banks, or assets jointly controlled by family members and/or co-founders. The existence of these specialized assets also explains why firm ownership is concentrated and why heirs or close relatives are chosen as successors in most of the succession events.

JEL Classifications: G32; L21; M13

Key Words: Succession; Family firms; asset specificity

1 Introduction

A wave of economics research focuses on family firms, a prevalent organizational form worldwide (La Porta, Lopez-De-Silanes, Shleifer, 1999; Claessens, Djankov, and Lang, 2000; Faccio and Lang, 2002). Based on large samples, this emerging literature uncovers several regularities: a tendency of family (heir or relative) succession, concentration of family ownership, and their associated mixed performance effects.[2]

The mixed performance of family firms and family succession is hard to reconcile with the prevalence of this organizational form. One possibility is that family firm organization is a second-best solution in weak institutional environments. Several papers suggest that though a professional manager is more productive, his interest is not necessarily aligned with the family (Bhattacharya and Ravikumar, 2002). The threat of outsider expropriation is expected to be serious in emerging markets where legal systems are weak to protect property rights (Burkart, Panuzi, and Shleifer, 2003).

Another explanation is that family firms are competitive, but families capture most of the rent while leaving little to outside investors (Villalonga and Amit, 2007). Consistent with the poor corporate governance, concentrated family control is typically associated with stock price discount (Claessens, Djankov, Fan, and Lang, 2002; La Porta, Lopez-De-Silanes, Shleifer, and Vishny, 2002).

There is clearly room for better understanding the causes and consequences of

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[2] A host of studies report that a firm's performance is superior when the firm is run by a founder CEO or an outside (hired) CEO, but worse if it is run by a descendant (Smith and Amoako-Adu, 1999; Morck, Strangeland, and Yeung, 2000; Anderson and Reeb, 2003; Perez-Gonzales, 2006; Villalonga and Amit, 2006). Bennedsen et al. (2007) employ the gender of the founder's first child as an instrument, and report that family successions, as oppose to successions by unrelated professionals cause an average 4% decline in return on assets, and the firm performance does not recover after succession.

family firms. In this study, we focus on a hypothesis that family ownership and family succession are arrangements to protect specialized assets that are difficult to partition, value, and transfer across organizational boundaries (Alchian, 1965; 1969). These specialized assets include intangibles such as relationships with stakeholders, ideologies, and/or assets jointly managed by family members or co-founders. We expect that the asset specificity induces high transfer costs, and hence the likelihood of family succession, high family ownership concentration, and poor performance in the succession process.

With the above hypothesis we study the following questions around succession: (1) How successful are successions of entrepreneurial firms?; (2) What determine the success (or failure)?; and (3) What determine the choice between a related and an unrelated successor?

Our hypothesis is best tested in emerging markets where weak institutions and idiosyncratic assets are prevalent. We examine 217 succession cases from Hong Kong, Singapore, and Taiwan during 1987 to 2005. In almost 65 percent of the cases, ownership and control of the firms were handed over to offsprings or close relatives of the pervious generation entrepreneurs. In about 22 percent of the cases, professional outsiders were hired to succeed the management while the founding families maintained the firm ownership. The remaining firms' controlling owners chose to exit by selling off their ownership to unrelated parties.

We provide strong evidence consistent with the transfer cost hypothesis. Family succession is chosen over outside succession when a firm has been co-managed by multiple family members, and when its business depends on relationships with stakeholders such as employees and banks. By contrast, co-founded businesses are much less likely to be succeeded by family members. Consistent with prior studies that the ability and experience of the offspring matters (Perez-Gonzales,

2006), we report that family succession is more likely when the family member is better educated or serving a senior position prior to taking the helm. Interestingly, we find that a similar set of variables explain the degree of ownership concentration of the firms. Ownership is more concentrated when a firm has more family members serving as managers/directors and/or is in a business where labor relation is critical.

The performance of the emerging market firms during their succession periods is strikingly poor. We report an average negative 56 percent net-of-market buy-and-hold stock return of the firms from 5 years before to the year of firm leadership turnover. Average stock return stabilizes but show little improvement in post-succession years. This extent of value destruction in succession is alarming, compared with that in more developed economies (e.g., Bennedsen et al., 2007).

Similar to the prior studies, we find that family succession and family ownership concentration are negatively associated with succession performance. When we further include the transfer cost factors as additional explanatory variables in the stock performance regressions, the effects of family succession and ownership concentration disappear. In particular, stock performance is worse when a firm has been run by a founder, jointly managed by co-founders or family members, or in a labor intensive industry. Consistent with the prior studies, stock performance is better when the successor has a high education level. This evidence suggests that asset specificity and its associated transfer costs are fundamental to succession performance, while family ownership and family succession are likely responses to the transfer cost concern.

Our overall empirical results point to the importance of asset specificity and its associated transfer costs in understanding the basic causes of the governance structures of entrepreneurial firms in emerging markets. These firms need to have more concentrated ownership, often in family hands, to preserve the value of their

specialized assets that are subject to the high costs if otherwise transferred across individuals or organizational boundaries. Partly because of the high transfer costs, the speed of share ownership diffusion of these firms is typically very slow. The overall high concentration and stickiness of ownership create difficulty in testing the theory using typical cross-sectional or time-serial data. Our succession events provide a unique opportunity to test the theory, because, by the natural force of aging, the old leadership has to be terminated and ownership and control transferred to the new generation.

We contribute to the literature by providing an equilibrium explanation of the family firm organization. We show that it is costly to have any kind of succession when an entrepreneurial firm has many non-transferable assets. It is not family succession that is costly but the non-transferable assets. Given these non-transferable assets the entrepreneur optimally chooses family succession over outside succession. We also show that family succession adds (or does not destroy as much) value compared to outside succession, in firms with abundant non-transferable assets.

In the next session, we more fully develop the hypothesis. We discuss the succession sample and empirical results in Section 3, and conclude the paper in Section 4.

2   Hypothesis development

2.1 The property right approach

The property right literature has long emphasized the effects of asset specificity on governance structures of business activities. Since Coase's (1937) path breaking article pointing out that firms exist to mitigate transaction costs, numerous refinements have been made to address what make transfers of property rights costly and why the observed governance structures help minimize the costs. Klein, Crawford,

and Alchian (1978) and Williamson (1979) suggest that holdup problem associated with post-contractual specialized investments can induce contract difficulties and hence encourage common ownership to govern the relationship of the parities in the transaction. In a similar vein, Grossman and Hart (1985) predict that ownership and control are given to the party who makes specialized investments, to induce sufficient such investments.

The property right approach has been quite successful in explaining why firms merge or integrate vertically (See Joskow (2005) for a survey of the literature). Likewise, the theory can potentially explain the structure of firm ownership and how it evolves over time (Demsetz, 1967; Demsetz and Lehn, 1985). Jensen and Meckling (1976) and numerous subsequent studies focus on the conflict of interest between managers and shareholders as firm ownership becomes diffused, and how firm value is affected by the agency problem (Morck, Shliefer, and Vishny, 1988, among many others).

Departing from the literature, this study pays attention to, in the context of succession, how transfer costs of specialized assets in entrepreneurial activities affect the governance structures (Williamson, 1985) of these activities.

2.2 Asset specificity and transfer costs in entrepreneurial activities

Entrepreneurial activities are special. First, surviving firms probably possess competitive advantages. These can be entrepreneurs' superior management skills, creativity, leadership charisma, secret formula, reputation, or business/political connections. These assets are specific to the entrepreneurs because they cannot be learned quickly or freely bought and sold in marketplace.

Second, entrepreneurial activities often consume a large amount of entrepreneurs' personal time, effort, and financial capital, dictating an ideology (strong personal interest) to take on these activities and associated risks. Because of

their specialized interests and inputs, entrepreneurs attach a high value of their firms that are not comparably priced by the market.

Third, entrepreneurial activities often involve strong team spirit. When the required financial and human capital inputs are large and beyond what an individual entrepreneur can supply, friends and/or family members often join to become both highly disciplined labor force and contributors of financial capital. Bonded and enforced by friendship or blood ties, contracts with co-founders or family members are often short of details.

The above specialized assets and relationships contribute to the initial success of entrepreneurial activities. However, difficulties arise when these assets are to be transferred across individuals or organizational boundaries. Unlike standardized assets that can be transferred within organization or bought and sold in the marketplace, the property rights of the specialized assets are hard to divide, evaluate, and transfer (Alchian, 1965, 1969). For example, a founder's ideology, reputation in business, and political connections are specific to the founder while difficult to be capitalized by another manager or even his own son. Specialized assets are not all intangible. For example, even in standardized business, family members or business partners may dispute about their individual contributions to and hence rewards of their team activities, resulting in costly infighting.

Because of the transfer difficulties of the specialized assets, we expect to observe persistent concentrated ownership and control of the assets, so that the value of the assets can be preserved.

2.3 Family or outside succession

Testing the transfer cost hypothesis is difficult using cross-sectional data because of endogeneity concerns. Succession provides a good opportunity for examining the hypothesis because ownership and control of firms are transferred by

force of nature – the aging of entrepreneurs. When an entrepreneur is getting very old, he would be forced to consider his successor to whom he would transfer the ownership/control of his firm. The choice of successor depends on how well the value of the specialized assets can be preserved, or conversely how large is the value dissipation during and after the transfer. We expect that an heir or a close relative would be chosen as the successor if the extent of asset specificity is large. Conversely, an important condition for outside succession (hiring a professional manager or selling off the firm) is that the firm's assets are standardized and easy to transfer across generations or organization boundaries.

2.4 Firm value

We expect an overall decline in firm capitalized value within the process of succession. Across different firms, the extent of value dissipation depends on the degree of asset specificity in their different activities.

Poor firm performance, when associated with persistent tight ownership and control by the entrepreneur, is often shown as evidence of entrenchment (Morck, Shleifer, and Vishny, 1988; Claessens et al., 2002). However, in our context the value loss in the succession process can not be simply attributed to managerial entrenchment – the entrepreneur is entrenched by his past success and reluctant to change or let go the business. It is likely that managerial entrenchment is endogenous to asset specificity. That is, the entrepreneur initially makes specialized investments, including his personal efforts[3], important to business success. A side effect of these investments is subsequent high transfer costs. The capital market and the market for corporate control would only price the specialized assets to a limited extent, creating a

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[3] Consistent with the entrenchment argument, Slovin and Sushka (1993) find that the death of a significant inside blockholder of a firm is associated with a positive stock price effect. More recent evidence challenge this view, however. Consistent with entrepreneurs' efforts matter, Bennedsen, Perez-Gonzalez, and Wolfenzon (2007) report that death of CEOs or their close relatives are associated with subsequent negative performance effects of their firms.

discrepancy between the market value and the firm value (Bhattacharya and Ravikumar, 2000). As a rational response to the high transfer costs, the founder will tightly control the assets and postpone the transfer of ownership and control of these assets until very late, even if substantial firm value dissipates in the process.

3   Empirical Results

3.1 The succession sample

We define a succession event as an entrepreneur stepping down from the top executive position, replaced by a family member or an unrelated professional. Different from ordinary managerial turnovers, a succession event is typically associated with transfer of controlling ownership from the entrepreneur to a family member (an offspring or close relative) or to an unrelated outsider in case of exiting.

We begin with all publicly-traded firms in three Asian economies: Hong Kong, Singapore and Taiwan. These economies are common in their prevalence of firms controlled by Chinese families. We manually go through historical annual reports of all the companies, to keep track of turnovers of the top executive (typically chairman) for each of the firms starting from the initial public offering year. We exclude firms that are controlled by non-Chinese or governments. We also exclude firms that are in financial distress around succession, to avoid our analysis being specific to the distress scenario. If any two turnovers of the same firm occur within 5 years, we exclude the earlier turnover as it is likely a transitory arrangement. An entrepreneur may remain influential to his successor even after stepping down. To mitigate this issue, we exclude any cases that an entrepreneur steps down from chairmanship but remains a director on the board.

The above screening criteria result in a sample of 217 succession events, of

which 62 are from Hong Kong, 47 from Singapore, and 108 from Taiwan. As shown in Table 1, most of the succession events occurred in the 1990s, but they did not concentrate in only a few years. Because of varying availability of corporate annual reports, the sample coverage varies across the three economies. The succession events span 1996 through 2005 in Hong Kong, 1992 through 2005 in Singapore, and 1987 through 2001 in Taiwan. The sample firms spread across various industry sectors, with higher concentration in the machinery, equipment, and instrument sector (44 cases) and construction and real estate sector (34 cases).

We rely on corporate annual reports and initial public offering prospectuses for tracking ultimate ownership and identifying relation between the old and new leadership of the firms. These public documents typically disclose information on director profiles, shareholdings of major shareholders, and related party transactions that are useful for identifying relationships among managers and directors. In addition, stories covered by various local newspapers, magazines and periodicals are referenced when they provide supplementary information.

Table 2 classifies the succession events by new leadership type and by economy. Overall, 140 or 65% of the succession events involve turnovers of chairmanship to family members, of which 79 (36%) are heir successions, 61 (28%) are successions by close relatives such as brothers or nephews. There are 47 cases (22%) in which the new chairmanship is given to an unrelated outsider, while the old chairman and his family maintain the controlling ownership. There are still 25 cases (12%) in which the old chairman and family not only leave the top executive position but also sell off the controlling ownership, and hence exit from the business entirely. We are unable to identify the relationship between the old and the new chairman in 5 Singaporean cases because of information limitation. Across the three economies,

Taiwan has the highest rate (74%) of family succession, followed by Hong Kong (69%) and Singapore (36%). Singapore has the highest rate of outside succession (36%), followed by Taiwan (22%) and Hong Kong (10%). Among the sold-out cases, Hong Kong accounts for the most (21%), followed by Singapore (17%) and Taiwan (4%).

3.2 Measurements

To test our key hypothesis, we construct a set of variables to proxy for the extent of asset specificity and associated transfer costs. Appendix 1 provides a summary of these variables. *Founder* is a dummy variable equal to one if the old chairman is the founder of the company, and otherwise zero. We expect that the degree of asset specificity is higher if a firm is not far away from its founding stage, and the founder likely imposes higher ideological factors in the firm's succession decisions. *Amenity* is another variable proxy for ideology. Similar to Demsetz and Lehn (1985), it is defined as a dummy variable equal to one if the company has any business in museum, gallery, recreation facility, club, garden, movie, newspaper or book publication, advertisement, restaurant and hotel, and otherwise zero.

Two variables are introduced to proxy for asset specificity arising from indivisibility of common property. *Co-founded* is a dummy variable equal to one if the firm is founded by more than one entrepreneur, and otherwise zero. *Family managed* is the number of family members serving as executive directors, including the entrepreneur. Excluding the entrepreneur would not affect the result in any way. We expect that co-founded firms or firms managed by more family members are subject to more serious infighting for property right re-distribution during succession.

Two variables are employed to capture intangible assets that pose high transfer costs. *Labor intensity* is the ratio of the number of employees to total shipment in the

firm's industry. The variable is estimated from the industry employment and shipment data from the 2002 U.S. Census. Employees' trust and relationships with an entrepreneur is likely a specialized asset. The specific relationships can be difficult to transfer across different generations of entrepreneurs. The issue is particularly thorny in labor intensive industries. *Bank relation* is the firm's ratio of long-term debt to total assets. Relationship banking is well known in emerging markets. Whether a firm has good access to long-term loans depends on its relation with banks.

Two variables are included to proxy for successor's capability that is found important in prior studies. *Experience* is a dummy variable equal to one if the successor has been a senior manager of the firm prior to succession, and otherwise zero. *Education* is a dummy variable equal to one if the successor has a bachelor or higher degree, and otherwise zero.

In all regressions, we include *Size*, defined as the natural logarithm of total assets, to control for any effects of firm size.

All the above variables are constructed using data from 5 years before the succession year, to prevent any effects of succession *per se*. Historical financial data are collected from *Worldscope,* supplemented by two additional databases, *PACAP* and *TEJ*, and corporate annual reports. When data is not available 5 years before succession, we use information from 3 years before the succession events.

Table 3 presents the basic statistics of the above variables. The number of observations used for calculating the statistics varies across variables, due to data availability. About 55% of the sample firms are controlled by founders prior to their succession events. Close to 6% of the firms have businesses associated with amenity. About 5% are co-founded firms. The average number of family members co-managing the firms is 2.45. The average labor intensity ratio is 0.009, with

substantial variations across firms as indicated by the value of its standard error 0.024. The average ratio of long-term debt to total assets is about 10%, with substantial variations across firms (standard error 0.14). Almost 44% of the successors have been senior managers before they take the helm. About 57% of them hold a bachelor or higher degree. The table also reports ownership statistics of the sample firms. The average ultimate equity ownership of the families is about 34%, comparable with the literature (Claessens, Djankov, and Lang, 2000; Claessens and Fan, 2002; Yeh and Woidtke, 2005).

We alternatively construct these variables using information from 3 years before the succession events and find similar patterns.

3.3 Successor choice and ownership structure

We perform a multinomial logistic regression to analyze the effects of specialized assets and associated transfer costs on successor choice. The dependent variable is *successor*, defined to be 3 if the successor is a family member of the old chairman, 2 if the successor is an unrelated outsider, and 1 if the successor is an unrelated outsider who also bought up the controlling ownership from the old chairman. On the right hand side, we include the variables introduced in the previous sub-section. Standard errors are clustered at the economy level (Petersen, 2005).

Column (1) of Table 4 reports the regression results. Several estimated coefficients turn out significantly related to the successor choice. The successor is more likely a family member of the previous chairman when more family members have been involved in the business, when the business is more labor intensive, and when bank relationship is more important. The effect of founder is positive but statistically insignificant. By contrast, the successor is less likely a family member of the previous chairman when the firm is co-founded. Consistent with prior studies, a

candidate's experience and education level both affect the probability that he/she later becomes the successor.

Although the positive relation between family members and family succession is interpreted as indivisible property rights resulting in family succession, it is also possibly due to the effect of family structure. Indeed, Bennedsen, Nielsen, and Wolfenzon (2007) find that a larger pool of potential heirs is associated with a higher likelihood of family succession. Note also that the negative effect of co-founders on family succession suggests that conflicts between co-founders is likely resolved by or lead to outside succession rather than family succession, consistent with Bertrand and Schoar (2006) and Bennedsen, Nielsen, and Wolfenzon (2007).

We alternatively perform a logit regression on a redefined successor variable equal to one if the successor is a family member, and zero otherwise. The results are similar to those of the multinomial logistic regression. We also re-run the logit regression after deleting the sold-out cases. The results are still similar.

We next regress the entrepreneur's and his family's ultimate ownership of the firm on the same set of explanatory variables, except for the experience and education variables. The ultimate ownership is the direct and indirect shareholdings of the controlling family estimated as La Porta et al. (1999) and Claessens, Djankov, and Lang (2000). Column (2) of Table 4 reports the ordinary least squares regression results. We find that the ownership concentration is higher when more family members are engaged in the business and when the firm is in a more labor intensive industry.

Overall, several proxies for asset specificity affect the choice of successor and ownership of the sample firms, consistent with our key hypothesis.

3.4 Firm value change

We are interested in a variable capturing firm value change during a succession process. Typically succession takes time to complete. We are uncertain about exactly when the process starts and ends. To facilitate our empirical analysis, we define a 9-year observation period starting from 5 years before the chairman turnover to 3 years after the turnover year. The 5-year period prior to the turnover year is to account for the fact that a succession process typically starts much earlier than the turnover year. We could alternatively choose a longer pre-turnover period. Because missing data issue is more serious in earlier years, choosing a longer pre-turnover period would leave us with a smaller sample of firms with sufficient data. The 3-year post succession period is chosen for the same reason.

In estimating firm value change, we employ an event study methodology. We use two approaches to estimate market adjusted stock return of a given firm. The first is compounded abnormal return (CAR). We calculate the monthly compounded return of a security within a defined period and the corresponding monthly compounded return of a market index. The difference between the security and the market index compounded return serves as our first proxy for firm value change. The second approach is to calculate the monthly abnormal return for security i on month t as

$$AR_{i,t} = R_{i,t} - R_{m,t}$$

, where $AR_{i,t}$ and $R_{i,t}$ are the abnormal and actual return for firm i for month t, respectively, and $R_{m,t}$ is the market index returns for month t. We add up $AR_{i,t}$ across all t to obtain cumulative abnormal returns.

In calculating these stock return measures, we use both equal- and value-weighted market index returns. We employ several time windows of different length: from month -60 to month -1, month -36 to month -1, and month 0 to month 48. Month 0 of a given event is defined as January of the succession year. Because the

results based on the various versions of stock returns are similar, we report the set of results based on the value-weighted market index and compounded abnormal returns.

Table 5 reports the summary statistics of CAR, the firm value change variable. The total number of usable observations is smaller than that of the full sample due to missing stock data explained earlier. To avoid the influence of extreme values, the CAR variable is winsorized at the top and bottom 5% level. Overall, firm value dissipates extraordinarily in the succession period. The pre-succession years average CAR is negative 56% when compounded from 5 years (60 months) before the succession year, and negative 16 percent when compounded from 3 years (36 months) before the succession year. Firm value stabilizes upon and after the turnover of chairmanship: the average CAR is negative 2.9% for the 4-year (48-month) period including and subsequent to the succession year. Even after winsorizing the data, we still observe large variations in the CAR patterns, indicated by the large standard errors. The median values of the various time windows are typically smaller than the mean values, suggesting that most firms experience value dissipation during the succession processes.

Hong Kong firms experience the most severe value decline with an average negative 126% pre-succession 60-month CAR. Taiwan firms' average CAR is negative 31%. By contrast, Singaporean firms' CAR is on average positive 22%. However, the median value is a much smaller 5%. During the post succession period, Hong Kong and Taiwan firms' values stabilize as indicated by the small average post-succession 48-month CAR. However, the average (median) post-succession CAR of the Singaporean firms is negative 18% (37%).

Figure 1 plots the average monthly CAR pattern of the full succession sample, starting from 60 months before to 48 months after month 0 (January of the succession year). During the entire 9-year period, the average CAR is almost negative 75%. The

CAR continuously declines until it becomes more stabilized around the succession year. However, the CAR does not increase but decrease further during the post-succession years. Note that in the figure the post-succession decline in CAR seems more substantial than the negative 3% when estimated from month 0 to 48, as reported in Table 5. The larger post-succession decline in CAR in Figure 1 is because that the pre-succession negative stock return from month -60 to month -1 has a compounding effect on the post-succession stock return.

Figure 2 reports the average monthly CAR pattern by economy. Hong Kong firms experience the most severe decline in CAR during successions, followed by Taiwan. Interestingly, Singaporean firms' average CAR does not reveal a significant decreasing or increasing pattern.

Overall, succession in the emerging economies is typically associated with severe value dissipation, consistent with our hypothesis that transferring property rights of entrepreneurial activities is challenging.

We next examine specific factors influencing firm value in succession. CAR of the three different time windows is alternately employed as the dependent variable in the regressions. Independent variables, specified below, are generally measured at the beginning year of which the CAR variable is estimated. For example, if CAR is estimated from 60 months before succession to month -1, all independent variables are estimated in year -5.

In Column (1) of Table 6, we regress the 60-month pre-succession CAR on whether the successor is a family member of the old chairman, whether the firm is sold out to unrelated parties, firm size and industry dummy variables. Clustered standard errors are estimated at the economy level. We find that family succession has a negative effect on CAR relative to succession by unrelated professional. Sold-out firms are also associated with a negative effect on CAR, but the coefficient is

statistically insignificant. Column (2) reports the results of a modified model excluding the successor type variables while including the family ultimate ownership variable. The ownership variable is negative and significant, suggesting more family ownership concentration is associated with more negative CAR.

Column (3) reports the results of a full model including the successor type variables, the family ownership variable, and the set of variables proxy for asset specificity and successor's experience and education level. Consistent with our key hypothesis, CAR is negatively affected by whether the old chairman is the founder, whether the business is co-founded, and the number of family members co-managing the business. By contrast, whether the successor is a family member or an unrelated professional no longer poses any effects on firm value. The sold-out cases are associated with the worst CAR as suggested by the negative and significant estimated coefficient.

Alternatively, we employ the pre-succession 36-month CAR as the dependent variable and re-run the full regression. Correspondingly, the independent variables are estimated using data from 3 years before the turnover year. In Column (4), the results are quite similar to those when the 60-month CAR is used. Moreover, labor intensity has a negative effect on CAR, while the successor's experience has a significant positive effect.

We also regress the post-succession 48-month CAR on the same set of independent variables but estimated with data from the succession year. In Column (5), most of the coefficients are statistically insignificant, suggesting that the asset specificity and other factors cease to be important to firm value change after the succession process is completed by the chairman turnover. Interestingly, the *founder* variable is significantly positive, indicating a more positive firm value effect after the founder steps down. The negative pre-succession effect (Column 3) and positive

post-succession effect (Column 5) of *founder* on firm value are consistent with the view that founders tend to stay in business for too long, possibly because of their subjective attachment to the firms they establish.

Most of the value destruction happens before the turnover year. This raises the question if the value destruction is primarily caused by the old chairman or his successor. Several explanations are possible. First, letting a family member takes over the firm destroys value, because he is incapable. To mitigate this concern we have controlled for experience and education level in the regressions, and found that they indeed matters. Second, it might be that the value destruction is not a consequence of the expected new management or transfer costs, but the cost of the old power hanging around too long. To examine if delaying succession *per se* causes the value destruction, we include the age of the old chairman upon the turnover year in the CAR regressions. We find that the age variable does not affect CAR, neither does it affect other results. Another possibility is that both the outgoing and the incoming chairman is capable, but that assets have to be liquidated to facilitate succession. For example, a part of the firm's assets might be given or sold to family members that are non-successors, to facilitate their exit. Also, government may levy taxes on succession transfer. To examine the possibility that the value decline in succession is mainly due to liquidation, we include in the CAR regressions a dummy variable equal to one if the firm's level of total assets is reduced between the fifth year before turnover to the turnover year. We find that this variable is indeed significantly positively related to CAR. However, it does not affect the other results.[4]

In summary, our analysis of stock return patterns provides strong evidence of value destruction in succession. After controlling for the transfer cost factors, the effects of family ownership and family succession disappear, suggesting these choices

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[4] We do not tabulate these results. They are available upon request.

may not be fundamental causes of the poor succession performance. In contrast, the extent of firm value change is significantly related to specialized assets in entrepreneurial activities, namely the founder and his ideology, indivisibility of property rights among co-founders and family members, and relationships with employees. Successor's experience prior to taking the helm helps pre-succession performance, consistent with the literature.

4   Conclusions

We have demonstrated that specialized assets play a crucial role in the succession of entrepreneurial firms. In the three emerging markets we have observed, there is a tendency that entrepreneurial firms, through heir successions, evolve into family owned and managed firms. There is also a tendency that family ownership stays concentrated across generations of management. The lack of or slow separation of ownership and control of the firms can be explained by protection of specialized assets commonly observed among entrepreneurial activities, including the entrepreneur's (especially the founder's) ideology, reputation, or relationship with stakeholders. These assets are specific to the entrepreneur hence difficult to divide, value, and/or transfer across individuals or organizational boundaries. Sometimes the asset *per se* is quite common but co-invested and/or co-managed by business partners or family members. As the contracts among the partners are implicit, they often face challenges in succession re-negotiation. Therefore, the specialized assets are best kept within family.

Consistent with the transfer cost hypothesis, when the transfer of the specialized assets occurs because of aging of the entrepreneur, we observe pronounced dissipation of firm value in the succession process. Moreover, the extent of value destruction critically depends on the extent to which the business being

transferred is non-standardized.

Entrepreneurs can attempt to professionalize/standardize their business early on to mitigate the transfer costs in succession. But not all do so and certainly not all succeed. It remains our future research opportunity to find out what determine entrepreneurs' choice between standardizing his business and staying unique.
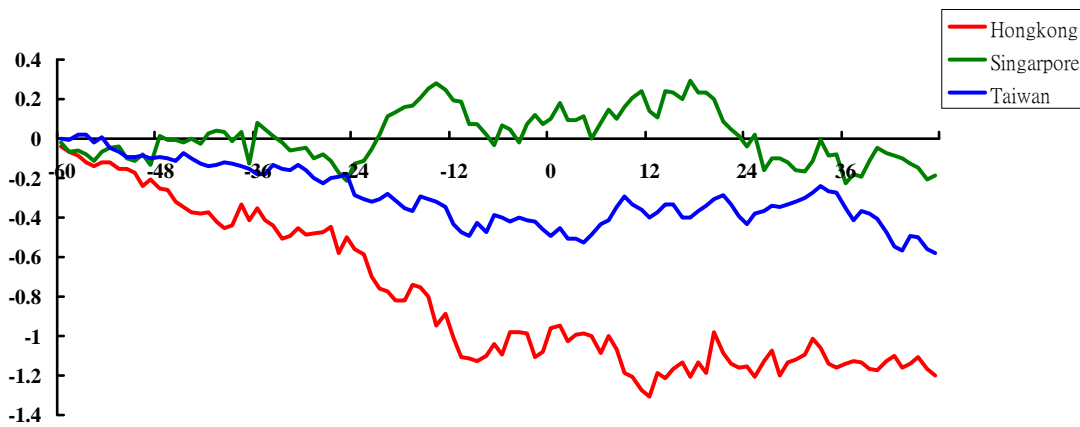
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Figure 1
Monthly Cumulative Abnormal Stock Return (CAR) around Succession
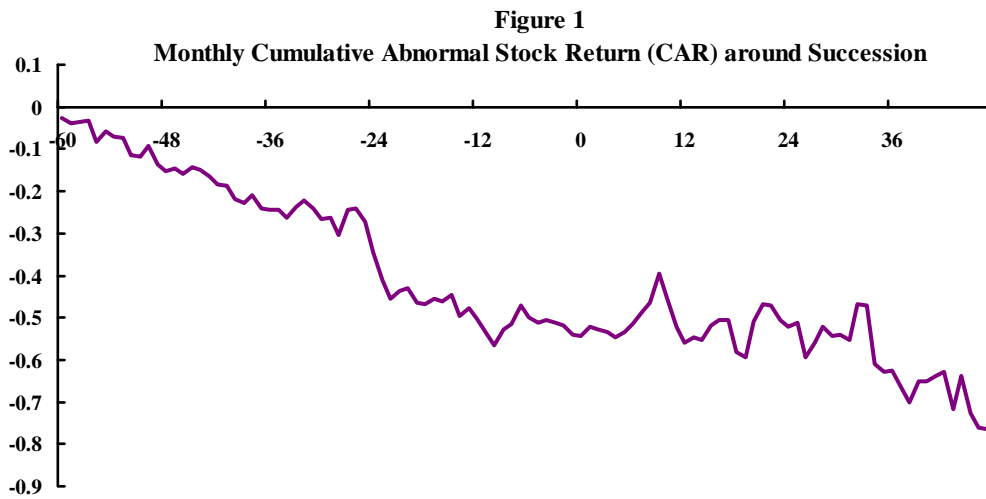
Figure 2 Monthly Cumulative Abnormal Stock Return (CAR) around Succession by Economy

Appendix 1 Variable Definition

Variable	Definition
Dependent Variables	
Successor	A variable defined to be 3 if the successor is a family member of the old chairman, 2 if the successor is an unrelated outsider, and 1 if the successor is an unrelated outsider who also bought up the controlling ownership from the old chairman.
Ultimate ownership	The direct and indirect shareholdings of the firm owned by the family, estimated as in La Porta et al. (1999) and Claessens et al. (2000).
CAR (-60, -1)	The monthly compounded abnormal stock return from 60 months before to the December immediately before the succession year.
CAR (-36, -1)	The monthly compounded abnormal stock return from 36 months before to the December immediately before the succession year.
CAR (0, +48)	The monthly compounded abnormal stock return from the January of the succession year to 48 months after that.
Independent Variables	
Founder	A dummy variable equal to one if the old chairman is the founder of the company, and otherwise zero.
Amenity	A dummy variable equal to one if the company has any business in museum, galleries, recreation facility, club, garden, movie, newspaper or book publication, advertisement, restaurant and hotel, and otherwise zero.
Co-founded	A dummy variable equal to one if the firm is founded by more than one entrepreneur, and otherwise zero.
Family managed	The number of family members serving as executive directors of the company.
Labor intensity	The ratio of the number of employees to total shipment in the firm's industry.
Bank relation	The ratio of long-term debt to total assets.
Experience	A dummy variable equal to one if the successor has been a senior manager of the firm prior to succession, and zero otherwise.
Education	A dummy variable equal to one if the successor has at least a bachelor degree, and zero otherwise.
Size	The natural logarithm of total assets.
Market-to-book	The market value of equity plus book value of debt divided by total book assets.
Return on assets	The ratio of net earnings to total assets.

Table 1 Sample Distribution

This table presents the sample by succession year and industry.

Panel A By succession year

Year	Hong Kong	Singapore	Taiwan	Total
1987	0	0	2	2
1988	0	0	4	4
1989	0	0	6	6
1990	0	0	6	6
1991	0	0	5	5
1992	0	4	6	10
1993	0	5	4	9
1994	0	6	7	13
1995	0	4	6	10
1996	4	5	11	20
1997	7	2	6	15
1998	3	3	8	14
1999	9	4	12	25
2000	12	4	13	29
2001	9	1	12	22
2002	8	3	0	11
2003	6	4	0	10
2004	2	1	0	3
2005	2	1	0	3
Total	62	47	108	217

Panel B By industry

Industry	Hong Kong	Singapore	Taiwan	Total
Agriculture, Forestry and Fishing	0	1	0	1
Construction and Real Estate	20	6	8	34
Food and Kindred Products	1	1	5	7
Textile and Apparel	3	1	13	17
Lumber, Furniture, Paper and Printing	1	2	4	7
Chemicals, Petroleum, Rubber, Plastic and Leather	5	0	15	20
Minerals and Metals	1	2	13	16
Machinery, Equipment and Instrument	11	7	26	44
Transportation and Communication	2	4	10	16
Utility	1	0	1	2
Commerce	8	5	6	19
Financial Company	4	7	3	14
Service	5	11	4	20

Table 2 Successor Types

The defined types include 'Family member', 'Outsiders' and 'Sold-out'. 'Unknown' is for firms whose successor type is unclear. We further differentiate the succession type of 'Family members' into heir succession 'Heir' and 'Relative', of which successors are close relatives such as brothers or nephews.

	Hong Kong		**Singapore**		**Taiwan**		**Total**	
Family member	43	69%	17	36%	80	74%	140	65%
Heir	18	29%	4	9%	57	53%	79	36%
Relative	25	40%	13	28%	23	21%	61	28%
Outsiders	6	10%	17	36%	24	22%	47	22%
Sold-out	13	21%	8	17%	4	4%	25	12%
Unknown	0	0%	5	11%	0	0%	5	2%
Total	62	100%	47	100%	108	100%	217	100%

Table 3 Summary Statistics of Independent Variables

This table presents the summary statistics of key independent variable variables in subsequent regressions. 'Founder' is a dummy variable equal to one if the old chairman is the founder of the company, and otherwise zero. 'Amenity' is a dummy variable equal to one if the company has any business in museum, galleries, recreation, club, garden, movie, publication, advertisement, restaurant and hotel, and otherwise zero. 'Co-founded' is a dummy variable equal to one if the firm is founded by more than one entrepreneur, and otherwise zero. 'Family managed' is the number of family members serving as executive directors in the company. 'Labor intensity' is the ratio of the number of employees to total shipment in the firm's industry. 'Bank relation' is the ratio of long-term debt to total assets. 'Experience' is a dummy variable equal to one if the successor has been a senior manager of the firm prior to succession, and zero otherwise. 'Education' is a dummy variable equal to one if the successor has at least a bachelor degree, and zero otherwise. 'Size' is the natural logarithm of total assets. 'Ultimate ownership' is the direct and indirect shareholdings of the firm owned by the family.

Variable	Obs.	Mean	Median	Std. Dev.
Founder	217	0.5530	1.00	0.4983
Amenity	217	0.0553	-	0.2291
Co-founded	217	0.0461	-	0.2101
Family managed	210	2.4476	2.0000	1.5027
Labor intensity	213	0.0089	0.0048	0.0239
Bank relation	216	0.0939	0.0491	0.1434
Experience	217	0.4378	-	0.4973
Education	217	0.5668	1.0000	0.4967
Size	217	11.8220	11.8315	1.4940
Ultimate ownership	202	0.3355	0.3106	0.2180

Table 4 Regression Results of Successor and Ownership Choices

Column (1) reports the results of multinomial logistic regression of successor choice. The dependent variable is 'Successor', defined to be 3 if the successor is a family member of the old chairman, 2 if the successor is an unrelated outsider, and 1 if the successor is an unrelated outsider who also bought up the controlling ownership from the old chairman. Column (2) reports the results of the ordinary least square regression of ownership choice. The dependent variable is the ultimate ownership of family. 'Founder' is a dummy variable equal to one if the old chairman is the founder of the company, and otherwise zero. 'Amenity' is a dummy variable equal to one if the company has any business in museum, galleries, recreation, club, garden, movie, publication, advertisement, restaurant and hotel, and otherwise zero. 'Co-founded' is a dummy variable equal to one if the firm is founded by more than one entrepreneur, and otherwise zero. 'Family managed' is the number of family members serving as executive directors in the company. 'Labor intensity' is the ratio of the number of employees to total shipment in the firm's industry. 'Bank relation' is the ratio of long-term debt to total assets. 'Experience' is a dummy variable equal to one if the successor has been a senior manager of the firm prior to succession, and zero otherwise. 'Education' is a dummy variable equal to one if the successor has at least a bachelor degree, and zero otherwise. 'Size' is the natural logarithm of total assets. Clustered standard errors are estimated at the economy level. Absolute values of t-statistics are in parentheses.***, ** and * denote significance at 1%, 5% and 10% level, respectively.

	Successor	Ultimate ownership
	(1)	(2)
Founder	0.661	-0.023
	(1.53)	(0.39)
Amenity	-0.156	0.035
	(0.91)	(0.69)
Co-founded	-0.579***	-0.066
	(3.09)	(1.19)
Family managed	0.210***	0.013***
	(3.08)	(4.07)
Labor intensity	5.313**	1.296***
	(1.99)	(3.54)
Bank relation	2.108***	0.058
	(4.38)	(1.19)
Experience	0.655*	
	(1.82)	
Education	0.494***	
	(3.37)	
Size	-0.057	-0.059***
	(0.94)	(39.68)
Constant		1.016***
		(10.63)
Number of observations	201	198
Pseudo R-square	0.165	0.20

Table 5 Statistics of Abnormal Stock Returns around Succession

This table provides the summary statistics of compounded abnormal stock returns. CAR (-60, -1) is the monthly compounded abnormal stock return from 60 months before to the December immediately before the succession year. CAR (-36, -1) is the monthly compounded abnormal stock return from 36 months before to the December immediately before the succession year. CAR (0, +48) is the monthly compounded abnormal stock return from the January of the succession year to 48 months after that.

Variable	Obs.	Mean	Median	Std. Dev.
Full sample				
CAR (-60, -1)	144	-0.5558	-0.5412	1.1225
CAR (-36, -1)	161	-0.1560	-0.2728	0.8471
CAR (0, +48)	179	-0.0288	-0.0754	0.8302
Hong Kong				
CAR (-60, -1)	54	-1.2567	-1.0224	0.8656
CAR (-36, -1)	58	-0.5400	-0.7600	0.7163
CAR (0, +48)	54	0.0233	-0.0930	1.0643
Singapore				
CAR (-60, -1)	30	0.2217	0.0484	0.7734
CAR (-36, -1)	32	0.1884	-0.0950	0.7176
CAR (0, +48)	32	-0.1849	-0.3734	0.8080
Taiwan				
CAR (-60, -1)	60	-0.3139	-0.4101	1.1270
CAR (-36, -1)	71	0.0025	-0.2244	0.8902
CAR (0, +48)	93	-0.0054	-0.0409	0.6712

Table 6 Regression Results of Firm Value Changes around Succession

The dependent variable is alternately CAR (-60, -1), CAR (-36, -1) and CAR (0, +48). 'Family member' is a dummy variable equal to one if the successor is a family member of old chairman, and zero otherwise. 'Sold-out' is a dummy variable equal to one if the firm is sold out to unrelated parties, and zero otherwise. 'Ultimate ownership' is the direct and indirect shareholdings of the firm owned by the family. 'Founder' is a dummy variable equal to one if the old chairman is the founder of the company, and otherwise zero. 'Amenity' is a dummy variable equal to one if the company has any business in museum, galleries, recreation, club, garden, movie, publication, advertisement, restaurant and hotel, and otherwise zero. 'Co-founded' is a dummy variable equal to one if the firm is founded by more than one entrepreneur, and otherwise zero. 'Family managed' is the number of family members serving as executive directors in the company. 'Labor intensity' is the ratio of the number of employees to total shipment in the firm's industry. 'Bank relation' is the ratio of long-term debt to total assets. 'Experience' is a dummy variable equal to one if the successor has been a senior manager of the firm prior to succession, and zero otherwise. 'Education' is a dummy variable equal to one if the successor has at least a bachelor degree, and zero otherwise. 'Size' is the natural logarithm of total assets. Industry dummy variables are included in Models (1) and (2). Ordinary least square regression is employed. Clustered standard errors are estimated at the economy level. Absolute values of t-statistics are in parentheses. ***, ** and * denote significance at 1%, 5% and 10% level, respectively.

	CAR (-60, -1)			CAR (-36, -1)	CAR (0,+48)
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
Family members	-0.378***		-0.236	-0.018	-0.019
	(4.79)		(0.90)	(0.13)	(0.21)
Sold-out	-0.549		-0.591*	0.118	0.075
	(1.34)		(1.85)	(0.40)	(0.51)
Ultimate ownership		-1.259**	-0.696	-0.568	0.238
		(2.51)	(1.58)	(1.33)	(0.59)
Founder			-0.402*	-0.058	0.126***
			(1.74)	(0.36)	(3.15)
Amenity			-0.223	0.031	-0.059
			(0.34)	(0.06)	(0.37)
Co-founded			-1.113***	-0.792***	-0.015
			(8.98)	(4.88)	(0.06)
Family managed			-0.081***	-0.075***	0.001
			(4.43)	(3.70)	(0.02)
Labor intensity			-1.513	-3.486***	-2.613
			(0.46)	(3.73)	(1.28)
Bank relation			0.804	0.528	0.046
			(1.03)	(1.48)	(0.07)
Experience			-0.168	0.212***	0.040
			(1.22)	(5.83)	(0.80)
Education			0.035	0.016	-0.070
			(0.32)	(0.13)	(0.38)
Size	0.003	-0.035	-0.080	-0.129***	0.044**
	(0.04)	(0.43)	(0.83)	(3.12)	(2.30)
Intercept	-0.062	0.633	1.408	1.752***	-0.690
	(0.05)	(0.82)	(1.12)	(2.88)	(1.10)
Industry dummies	Yes	Yes	No	No	No
Number of observations	131	131	131	146	161
Adjusted R-square	0.10	0.12	0.17	0.13	0.02